

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. John D. Lanza Reg. No. 40,060 on 03/03/2010 and communications with his associate Mia K. Fiedler on 3/16/2010.

3. Pursuant to MPEP 606.01 the title has been changed to read:

-- SYSTEM FOR VIRTUALIZING ACCESS TO NAMED SYSTEM OBJECTS
USING RULE ACTION ASSOCIATED WITH REQUEST--

4. The following claims had been amended:

This listing of claim will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for virtualizing access to named system objects, the method comprising instructing a suitably programmed computer to perform the steps of:

(a) receiving a request to access a system object stored in a memory element provided by a computer, the request received from a process executing in a context of an

isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object;

(b) selecting, by the computer, a rule action associated with the request, the selection responsive to the request received from the process executing in the context of the isolation environment, and determining that a rule action from a group consisting of ignore, redirect and isolate, is associated with the request;

(c) forming a literal name for the system object in response to the selected rule action; and

(d) issuing, to an operating system executing on the computer, a request to access the system object, the request including the literal name for the system object.

2. (Currently Amended) The method of claim 1 wherein the system object is selected from a group consisting of a semaphore, a mutex, a mutant, a timer, an event, a job object, a file-mapping object, a section, a named pipe, and a mailslot.

3. (Currently Amended) The method of claim 1 wherein step (a) further comprises receiving, from a hooking function, the request to access the system object from the process executing in the context of the isolation environment.

4. (Currently Amended) The method of claim 1 wherein the request to access the system object comprises a request to open the system object.

5. (Currently Amended) The method of claim 1 wherein the request to access the system object further comprises a request to create the system object.

6. (Canceled)

7. (Currently Amended) The method of claim 1 wherein step (b) further comprises accessing a rules engine to determine the rule action associated with the virtual name included in the request.

8. (Currently Amended) The method of claim 1 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a session-specific identifier.

9. (Currently Amended) The method of claim 1 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and an application-specific identifier, the application-specific identifier associated with the application isolation layer with which the process making the request is associated.

10. (Currently Amended) The method of claim 1 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the request and a user-

specific identifier, the user-specific identifier associated with the user isolation layer in which the process making the request executes.

11. (Previously Amended) The method of claim 1 wherein step (c) further comprises the step of forming the literal name for the system object stored in the memory element provided by the computer identifying the system object as having global visibility.

12. (Previously Amended) The method of claim 1 wherein step (c) further comprises the step of forming the literal name for the system object stored in the memory element provided by the computer identifying the system object as having session visibility.

13. (Previously Amended) The method of claim 1 wherein step (c) comprises forming the literal name for the system object stored in the memory element provided by the computer that is identical to the virtual name provided in the request.

14. (Currently Amended) The method of claim 1 further comprising the step of receiving a handle from the operating system identifying the accessed system object.

15. (Original) The method of claim 14 further comprising the step of transmitting the handle to the process.

16. (Currently Amended) The method of claim 1 further comprising receiving a second request to access the system object from a second process executing in a context of a second isolation environment comprising a second application isolation layer and a second user isolation layer, the second request including the virtual name for the object.

17. (Currently Amended) The method of claim 16 wherein step (c) further comprises forming, responsive to the second request received from the second process executing in the context of the second isolation environment, a literal name for the system object using the virtual name provided in the second request and a session-specific identifier.

18. (Currently Amended) The method of claim 17 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the second request and an application-specific identifier, the application-specific identifier associated with the application isolation layer with which the second process making the second request is associated.

19. (Currently Amended) The method of claim 17 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer using the virtual name provided in the second request and a user-specific identifier, the user-specific identifier associated with the second user isolation layer in which the second process making the second request executes.

20. (Currently Amended) The method of claim 16 wherein step (c) further comprises forming the literal name for the system object stored in the memory element provided by the computer that is identical to the virtual name provided in the second request.

21. (Previously Presented) The method of claim 1 further comprising the step of receiving a request to access the system object from a second process executing in the context of the user isolation layer, the request including the virtual name for the object.

22. (Currently Amended) The method of claim 21 wherein step (c) further comprises forming, responsive to the request received from the second process executing in the context of the isolation environment, the literal name for the system object using the virtual name provided in the request and a session-specific identifier.

23. (Currently Amended) The method of claim 22 wherein step (c) further comprises forming the literal name for the system object using the virtual name provided in the request and an application-specific identifier, the application-specific identifier associated with the application isolation layer with which the second process making the request is associated.

24. (Currently Amended) The method of claim 22 wherein step (c) further comprises forming the literal name for the system object using the virtual name provided

in the request and a user-specific identifier, the user-specific identifier associated with the user isolation layer in which the second process making the request executes.

25. (Currently Amended) The method of claim 21 wherein step (c) further comprises forming the literal name for the system object that is identical to the virtual name provided in the request.

26. (Currently Amended) An article of manufacture having executable instructions stored thereon when the instructions are executed by a computer, causing the computer to virtualize access to named system objects, the article of manufacture comprising:

computer-readable program means for receiving a request to access a system object from a process executing in a context of an isolation environment, the isolation environment comprising an application isolation layer and a user isolation layer, the request including a virtual name for the system object;

computer-readable program means for selecting by the computer, a rule action associated with the request, the selection responsive to the request received from the process executing in the context of the isolation environment, and determining that a rule action from a group consisting of ignore, redirect and isolate is associated with the request;

computer-readable program means for forming a literal name for the system object responsive to the selected rule action; and

computer-readable program means for issuing, to an operating system executing on the computer, a request to access the system object, the request including the literal name for the system object.

27. (Currently Amended) The article of manufacture of claim 26 wherein the computer-readable program means for receiving the request further comprises_a request to open the system object.

28. (Currently Amended) The article of manufacture of claim 26 wherein the computer-readable program means for receiving the request further comprises_a request to create the system object.

29. (Currently Amended) The article of manufacture of claim 26 further comprising computer-readable program means for storing the rule action associated with the request.

30. (Currently Amended) The article of manufacture of claim 29 wherein the computer-readable program means for storing the rule action further comprises a database.

31. (Currently Amended) The article of manufacture of claim 26 wherein the computer-readable program means for forming the literal name for the system object further comprises forming the literal name for the system object that is identical to the virtual name.

32. (Currently Amended) The article of manufacture of claim 26 wherein the computer-readable program means for forming the literal name for the system object further comprises forming the literal name for the system object using the virtual name and a session-specific identifier.

33. (Currently Amended) The article of manufacture of claim 32 wherein an application-specific identifier is associated with the application isolation layer with which the process making the request is associated.

34. (Currently Amended) The article of manufacture of claim 32 wherein a user-specific identifier is associated with the user isolation layer in which the process making the request executes.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLY W HUARACHA whose telephone number is (571) 270-5510. The examiner can normally be reached on M-F 8:30am to 6:00pm, EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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